Swanson Creek Marsh Incident: The Challenges of Wildlife Response on a River

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Incident History

- On 7 April 2000, a rupture occurred in the pipeline supplying the Chalk Point Generating Station of the Potomac Electric Power Company (PEPCO)
- Supplies No. 6 fuel oil; at time of incident line was being cleaned using No. 2 fuel oil
- Approximately 126,000 gallons of oil released (combination of No. 6 & 2 oils)

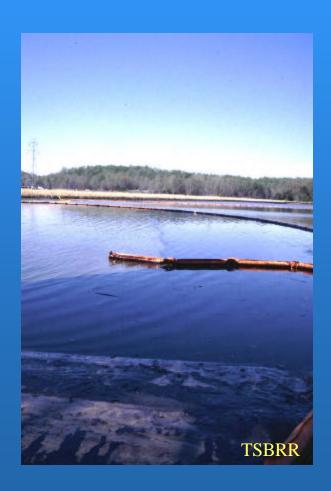
Incident Location

- Aquasco, Prince George's County, Maryland
- Swanson Creek, including tidal marsh
- Swanson Creek feeds into the Patuxent River



Incident Evolution

- Initially contained within the creek using redundant booming
- Severe storm on the night of 8 April 2000
- Oil breached booms,
 spreading ~ 17 miles
 down river and
 impacting ~ 40 miles
 of shoreline



Incident Evolution

- Emergency response phase: 7 April to 16 May 2000
 - > 800 responders daily during initial weeks
 - utilized more than 80 boats daily
 - wildlife assessment teams formed quickly
- Long term clean-up currently ongoing



Wildlife Assessment Teams

- Teams assigned areas by Wildlife Branch Director (USFWS)
- Teams initiated rapidly
- Surveyed wildlife in the area
 - clean, oiled and carcasses
- Focused retrieval efforts

Communications



- Phones (hard lines)
- Pagers
- Cellular phones
- Radios
 - two channels

Transportation

• Vehicles

- live animal transport
- carcass / cooler transport

• Boats

- airboats
- flat bottom skiffs
- kayaks



Access

- Local road pattern
- One bridge
- Residential areas
 - retrieval efforts oftenrequired multiplepermissions for access
- Habitat sensitivity



Resources at Risk



• Shoreline Types

- marsh
- sand
- shrub and grass
- riprap
- man-made
 - commercial marinas
 - residential

Resources at Risk



Wildlife

- shellfish
- fish
- herpatiles
- birds
- mammals

Species of Special Interest

- Bald Eagle (Haliaeetus leucocephalus)
- Osprey (Pandion haliaetus)
- Great Blue Heron (Ardea herodias)
- Diamondback Terrapin (Malaclemys terrapin)

Bald Eagle

- Federally listed species
- Nesting with chicks
- No-fly zone requested
- Monitoring program by USFWS



Great Blue Heron

- Rookery within spill zone
- High sensitivity to disturbance
- Nesting with eggs
- Monitoring program by USFWS & PEPCO



Diamondback Terrapin



- High profile species
- Commercial fishery
- Pre-existing long term study area within spill zone
- Lay eggs in the sandy shorelines
- NRDAR topic

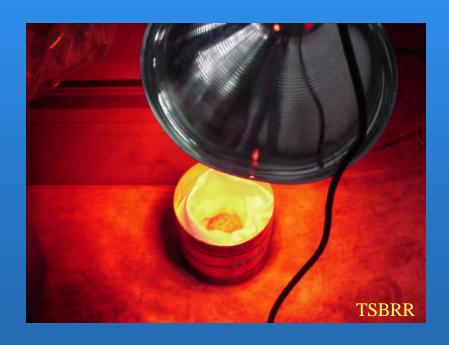
Osprey

- Highly visible species
- Significant local population
- Nesting with eggs
- PEPCO had preexisting monitoring program



Osprey

- Special rehabilitation protocol developed to address nesting status
 - trapped on nest
 - eggs
 - medical evaluation
 - expedited cleaning
 - banded & released
- High nest site competition



Other Notable Species

- Semi-domestic and hybrid waterfowl
- Muskrats (Ondatra zibethica)
 - permit requirements, severely affected
- Mute swans (Cygnus olor)
 - invasive species, proposed population control program, public interest

Release

- Emergency clean-up phase lasted ~ 5 wks
- Animals rehabilitated and ready for release by 20 April only 2 weeks into the response
- Habitat considerations for release discussed with PEPCO, wildlife trustees and wildlife rehabilitators
- Joint Information Center, community outreach and public education

Release - species notes

- Ruddy ducks (Oxyura jamaicensis)
 - migration allows for consideration of alternative release sites
- Resident waterfowl
- Reptiles
 - return to retrieval location important
 - mud turtles from Swanson Creek relocated

Conclusion

- River spills can consume large amounts of response resources
- Wildlife assessment teams beneficial in focusing wildlife efforts
- Wildlife resource monitoring programs important part of overall wildlife response